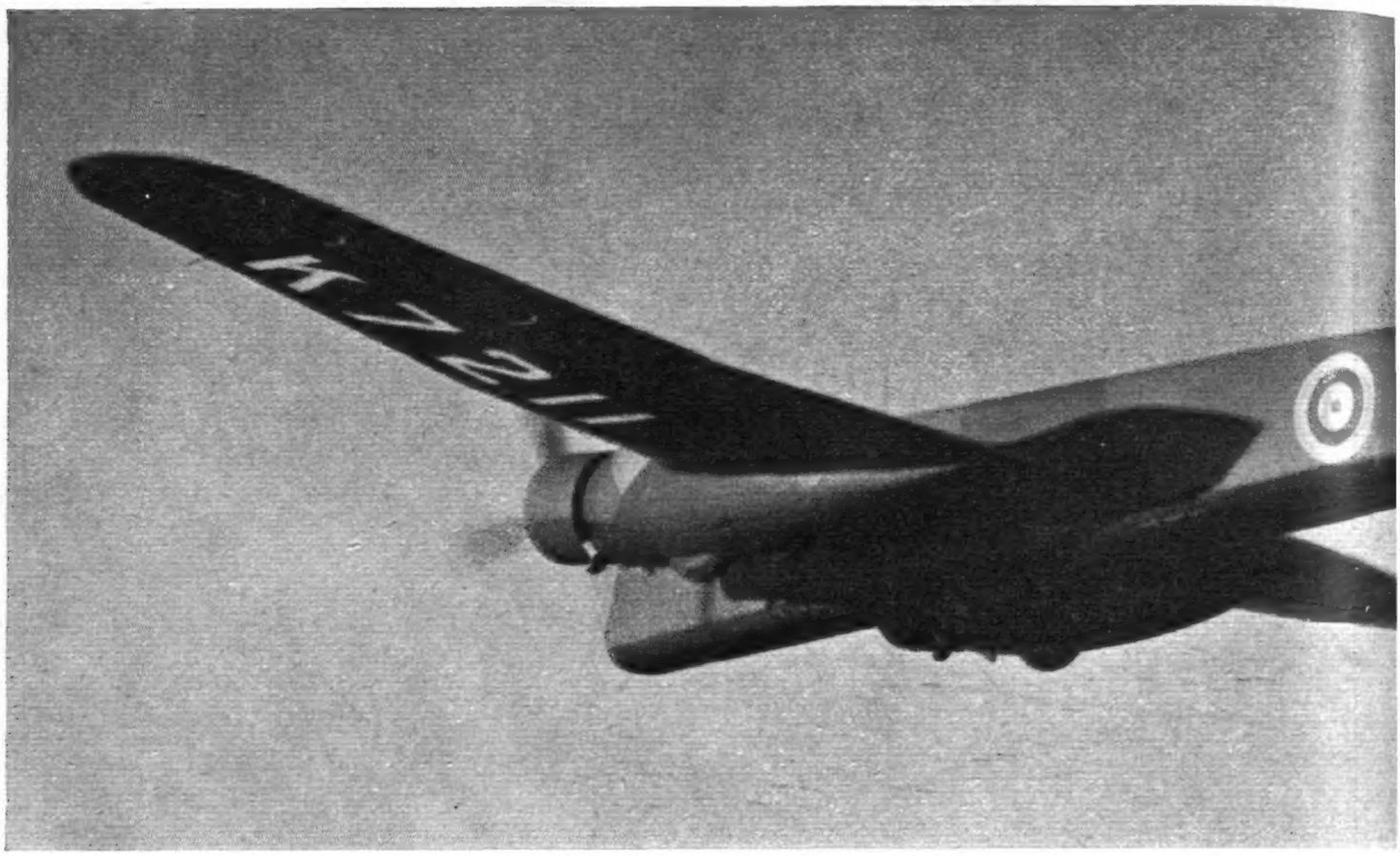

A MODERN HEAVY BOMBER

The Armstrong Whitworth Whitley : Structure and Equipment Features in Detail : 200 m.p.h. with Disposable Load of 7,385lb.

Illustrated with "Flight" Photographs

OF the two types of heavy bomber in large-scale production for the R.A.F., the Armstrong Whitworth Whitley was the first to take the air, having been developed in several respects from the A.W.23 bomber transport, which may be classed among the more outstanding weight-lifting machines produced in recent years. A fuselage of smaller cross-section and the introduction of more advanced engine types has given the Whitley a greatly improved performance as compared with the "23," and could some formula be devised to assess the actual value of a machine as a military weapon, taking into consideration performance, disposable load, flying qualities and the efficiency of the armament layout, the Whitley would undoubtedly make a very good showing against comparable types going into service abroad.

In the cockpit of the Whitley. There is ample room for the two pilots, and the view in all essential directions is unrestricted. At the controls when this picture was taken was F/O. E. S. Greenwood.

The original series of Whitleys, designated Whitley I, was fitted with two medium-supercharged Siddeley Tiger IX fourteen-cylinder two-row radials giving a maximum power of 805 h.p. at 7,200ft., and mounted Armstrong Whitworth manually operated gun turrets. The second series (Whitley II) has a later type of Tiger—the Mk. VIII with two-speed supercharger. This unit is rated at 845 h.p. at 6,250ft. (low gear) and 760 h.p. at 12,750 (high gear), the maximum output being 780 h.p. at 14,250ft. The Whitley II, incidentally, is the first Service type to receive this engine and, so far as is known, the first military aeroplane to take advantage of the benefits conferred by the two-speed blower.

Differences

Both the Whitley II and Whitley III have these engines, but the latter incorporates Nash and Thompson power-operated gun turrets. It may be recalled that the demonstration Whitley at the last S.B.A.C. display had temporary fairings, pending the fitting of the turrets. Certain other detail improvements, including the adoption of a new type of bomb rack, are being made in the later types of Whitley.

As supplied to the R.A.F., the Whitley is intended for long-range bombing operations by day and night, and production machines are camouflaged accordingly. Precisely what proportion of the disposable load is made up by the bombs may not be divulged, but anyone who has seen the capacious bomb cells will realise that the Whitley's